

**Technology:** [Integrated surface stimulation device for pain management and wound therapy](#)

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**Abstract**

The present invention provides a thin and flexible device and method of use thereof for pain and wound treatment of a subject. The integrated surface stimulation device may comprise a complete wireless stimulation system in a disposable and/or reusable flexible device for widespread use in multiple therapeutic applications. The invention would be situated on the skin surface of a patient and would be activated so as to reduce the overall occurrence of pain and/or increase wound healing rates. As provided, the device will comprise an integrated power supply and pre-programmable stimulator/control system mounted on the upper face of a flexible polymeric substrate layer. The lower face of the substrate layer will comprise areas of stimulating electrodes, applied using thin film coating techniques. The device can then be applied to the user with a medical grade pressure sensitive adhesive coating provided on the lower face of the substrate layer.